


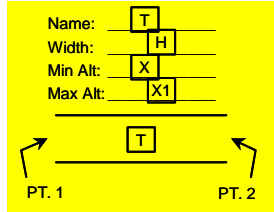
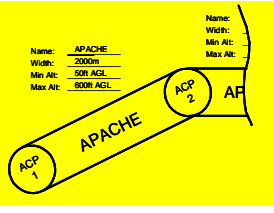
DEFENSE INFORMATION SYSTEMS AGENCY
Interoperability Directorate, 5600 Columbia Pike, Falls Church, VA 22041-2717
SYMBOLGY STANDARDS MANAGEMENT COMMITTEE DIRECTIVE

SSMC NO: 2-03		Date: July 24, 2003																																									
CP No: MIL01-10		Title: Changes to Standard-Use Army Aircraft Flight Route (SAAFR)																																									
Originator, Name and Address: PM FATDS																																											
SSMC Action: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Approved with Changes <input type="checkbox"/> Withdrawn <input type="checkbox"/> Deferred <input type="checkbox"/> Declared Substantive By: <input type="checkbox"/> Disapproved <input type="checkbox"/> Testing Required <input type="checkbox"/> Prior to Decision <input type="checkbox"/> Subsequent to Decision <input type="checkbox"/> Allied Coordination Required Votes Cast/Proposed Change <table style="width: 100%; border: none;"><thead><tr><th style="text-align: left;">Approve</th><th style="text-align: left;">Disapprove</th><th style="text-align: left;">Abstain</th><th style="text-align: left;">N/A</th><th></th></tr></thead><tbody><tr><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>USA</td></tr><tr><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>USN</td></tr><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td>USMC</td></tr><tr><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>USAF</td></tr><tr><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>NIMA</td></tr><tr><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>DIA</td></tr><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>DISA</td></tr></tbody></table>		Approve	Disapprove	Abstain	N/A		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	USA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	USN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	USMC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	USAF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NIMA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DIA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DISA	Decision: Approved as submitted.	
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SYMBOLGY CONFIGURATION MANAGEMENT CHANGE PROPOSAL FORM			
CHANGE PROPOSAL NUMBER		MIL01-10	
ORIGINATOR	SPONSOR	DATE RECEIVED	DATE OF ACTION
JIEO	JIEO	September 20, 2001	July 24, 2003
CHANGE PROPOSAL TITLE			
Changes to C ² and General Maneuver, Aviation, Lines, Standard-Use Army Aircraft Flight Route (SAAFR) (2.X.2.2.2.3) Graphics and Parameters			
SUGGESTED CHANGE			
<p>1. <u>STATEMENT OF THE PROBLEM:</u> The SAAFR graphic's (2.X.2.2.2.3) definition graphic does not define anchor point locations and does not display, or incorrectly displays, required text modifier fields.</p> <p>2. <u>PROBLEM ANALYSIS:</u></p> <p>a. The SAAFR graphic's drawing parameters indicate that 2 anchor points are required for this graphic. However, the definition graphic does not indicate the location of the required anchor points. This leaves anchor point placement to the discretion of the software writers. Anchor point placement can be interpolated from other air route/corridor type graphics. Once the standard allows software writers to interpret or make decisions on anchor point location we are bound to experience interoperability problems.</p> <p>b. Interoperability requires specificity so that multiple vendors have the same understanding for drawing symbols the same way. The SAAFR does not direct which text modifier fields to use or where they should be placed. The SAAFR contains 5 text fields to portray three different information requirements; 1. Name, used two times (once inside the graphic and once with the supporting text information), 2. Width, used one time, 3. Altitude, used two times (defines the minimum and maximum altitude limits). Field "T" (Unique Designation) is appropriate for providing "Name" information. Width, can be fulfilled by field "H" (Additional Information) since there is no field which corresponds to measurements. Field "H" can also fulfill Altitude information requirements since there is no modifier field for Altitude available for tactical graphics. However, Table III (Modifier field definitions for tactical symbols) has a modifier, "X," for tactical symbols that provides a text modifier for altitude/depth. Shouldn't field "X" correspond to tactical graphics as well as warfighting symbols? After all, field "T" is always a Unique Designation, whether for warfighting symbols or tactical graphics. Likewise, field "W" is always Time in both and field "Y" is always Location in both. Therefore, if there is a requirement to define Altitude, field "X" should be used.</p> <p>3. <u>PROPOSED SOLUTION:</u></p> <p>a. Modify definition graphic as shown in attachment A.</p> <p>b. Modify example graphic as shown in attachment A.</p> <p>c. Modify drawing parameters as shown in attachment A.</p> <p>d. Modify Tables X and XIII to include text modifier field "X" for use with tactical graphics. Table X, see attachment B. Table XIII, see attachment C.</p> <p>4. <u>ALTERNATE SOLUTIONS:</u> To be determined.</p> <p>5. <u>AFFECTED DOCUMENTATION:</u> MIL-STD-2525B Table X, Table XIII, and Appendix B, Table B-IV</p> <p>6. <u>IMPACT ON OTHER STANDARDS:</u> Unknown.</p> <p>7. <u>INCORPORATION VERSION:</u> MIL-STD-2525C.</p> <p>8. <u>OTHER CONSIDERATIONS:</u></p> <p>9. <u>REFERENCES:</u></p>			

SYMBOLGY CONFIGURATION MANAGEMENT CHANGE PROPOSAL FORM			
CHANGE PROPOSAL NUMBER		MIL01-10	
ORIGINATOR	SPONSOR	DATE RECEIVED	DATE OF ACTION
JIEO	JIEO	September 20, 2001	July 24, 2003
CHANGE PROPOSAL TITLE			
Changes to C ² and General Maneuver, Aviation, Lines, Standard-Use Army Aircraft Flight Route (SAAFR) (2.X.2.2.2.3) Graphics and Parameters			
<p>a. SSMC Action Item 3-01-4 - JIEO will develop a CP to add text and altitude field modifiers in 2.X.2.2.2.3.</p> <p>b. SSMC Action Item 00-01, ASPO/TRW (Graphic Situation Display) comment 43 presented at SSMC 1-01. - 43. Nature of Change: Table B-IV, page 345, 2.X.2.2.2.3 refers to Name (twice), Width, Min. Alt., and Max. Alt. text fields. However, there is no indication which fields in Table X, page 36, correspond to these fields. Using the Aviation Area graphics as guidelines it seems reasonable that Name corresponds to field T (Unique Designation), Min. Alt. corresponds to field H (Additional Information), and Max. Alt. corresponds to field H1 (Additional Information 1). However, there is no way to know for sure which field corresponds to Width. Furthermore, since this graphic is a Line, Additional Information is not defined for it.</p> <p>Reason for Recommendation: Need direction on which fields in Table X match the fields in the graphic's definition.</p>			
10. ATTACHMENTS: A. Recommended changes to Table B-IV, C ² Symbolgy: <u>Military Operations Set</u> . B. Recommended changes to Table X, <u>Modifier field definitions and maximum display lengths for tactical graphics</u> . C. Recommended changes to Table XIII, <u>Transmission lengths for tactical symbols and tactical graphics</u> .			
JIEO ANALYSIS			
1. <u>POTENTIAL CONFLICTS WITH EXISTING SYMBOLGY:</u> 2. <u>CONFORMANCE TO SYMBOL GUIDELINES:</u> 3. <u>ADEQUACY AND IMPACT ON OTHER PROGRAMS:</u>			
C/S/A COMMENTS			
DECISION NOTICE			
Approved at SSMC 2-03.			

The recommended changes are highlighted.

DESCRIPTION	STATIC/ DYNAMIC	HIERARCHY	TACTICAL GRAPHIC
		SYM-ID	
COMMAND AND CONTROL AND GENERAL MANEUVER AVIATION LINES	N/A	2.X.2.2.2	
COMMAND AND CONTROL AND GENERAL MANEUVER AVIATION LINES STANDARD-USE ARMY AIRCRAFT FLIGHT ROUTE (SAAFR) <u>Parameters</u> 1. Anchor points. This graphic may contain multiple segments. Each segment requires 2 anchor points. Each anchor point defines the endpoint of a segment's centerline. The anchor points are Air Control Points (ACP, 2.X.2.2.1.1), Communications Check Points (CCP, 2.X.2.2.1.2) or a combination of the two. 2. Size/Shape. Points 1 and 2 determine the length and width of the graphic. The information field inside each segment should be moveable and scalable within each segment. The information fields outside each segment should be moveable and scalable in close proximity to, but outside each segment. 3. Orientation. The anchor points determine orientation.	D	2.X.2.2.2.3 G*GPALS--- ***X	 

Attachment B to MIL01-10. Recommended changes to Table X, Modifier field definitions and maximum display lengths for tactical graphics.

Add field “X” (Altitude/Depth) to Table X to make it a legal text modifier field for tactical graphics. The recommended changes are highlighted.

TABLE X. Modifier field definitions and maximum display lengths for tactical graphics.

FIELD ID	FIELD TITLE	DESCRIPTION	P ¹	L ¹	A ¹	BL ¹	N ¹	B/C ¹
A	Symbol Indicator	The basic graphic (see paragraph 5.5.1).	G ²	G	G	G	G	G
B	Echelon	A graphic modifier in a boundary graphic that identifies command level (see paragraph 5.5.2.2 and tables IV and VIII).	-	G	G	G	-	-
C	Quantity	A text modifier in a nuclear symbol that identifies the detonation in kilotons; yield (can be displayed in decimals).	-	-	-	-	6 ²	-
H	Additional Information	A text modifier for tactical graphics; content is implementation specific.	20	20	20	-	20	20
N	Hostile (Enemy)	A text modifier for tactical graphics; letters "ENY" denote hostile symbols	3	3	3	3	3	3
Q	Direction of Movement Indicator	A graphic modifier for nuclear, biological, and chemical (NBC) events that identifies the direction of movement (see paragraph 5.5.2.1 and figure 11).	-	-	-	-	G	G
S	Offset Location Indicator	A graphic modifier for points and nuclear, biological, and chemical (NBC) events used when placing an object away from its actual location (see paragraph 5.5.2.3 and figures 10, 11, and 12).	G	-	-	-	G	G
T	Unique Designation	A text modifier that uniquely identifies a particular tactical graphic; track number. Nuclear: delivery unit (missile, aircraft, satellite, etc.)	15	15	15	35	15	15
V	Type	A text modifier that indicates nuclear weapon type.	-	-	-	-	20	-
W ³	Date/Time Group (DTG)	A text modifier that displays Date/Time Group format: DDHHMMSSZMONYY.	20	20	20	-	20	20
X	Altitude/Depth	A text modifier that displays the minimum, maximum or restricted flight level altitudes for aircraft, altitude in feet above ground level (AGL). Depth for submerged objects in feet below sea level.	6	6	6	-	6	6
Y	Location (Latitude and Longitude)	A text modifier that displays a graphic's location in degrees, minutes, and seconds (or in UTM or other applicable display format).	19	19	19	19	19	19

Attachment C to MIL01-10. Recommended changes to Table XIII, Transmission lengths for tactical symbols and tactical graphics.

Modify field “X” (Altitude/Depth) in Table XIII to agree with Table X. The recommended changes are highlighted.

Table XIII. Transmission lengths for tactical symbols and tactical graphics. - continued

FIELD ID	FIELD TITLE	U ²	E ²	I ²	SI ²	M ²	P ²	L ²	A ²	BL ²	N ²	B/C ²	FORMAT
R	Mobility Indicator; Towed Sonar Array Indicator	-	*	-	-	-	-	-	-	-	-	-	SYM-ID code positions 11- 12
R2	SIGINT Mobility Indicator	-	-	-	1	-	-	-	-	-	-	-	-
S	Headquarters Staff Indicator/ Offset Location Indicator	*	*	*	-	*	-	-	-	-	-	-	-
T	Unique Designation	21	21	21	21	21	15	15	15	35	15	15	-
V	Type	-	24	-	24	-	-	-	-	-	20	-	-
W ⁶	Date/Time Group (DTG)	20	20	20	20	20	20	20	20	-	20	20	Alphanumeric field for date/time for transmission conforms with MIL-STD-2500B (YYYYMMDD HHNNSS)
X	Altitude/ Depth	6	6	6	-	6	6	6	6	-	6	6	-
Y ⁷	Location	19	19	19	19	19	19	19	19	19	19	19	Conforms to decimal degrees format: xx.ddddhyyy.d ddddh where xx = degrees latitude yyy = degrees longitude .dddd = decimal degrees h = direction (N, E, S, W)
Z	Speed	8	8	8	-	8	-	-	-	-	-	-	-